

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

Subject: Reclamation Rural Water Supply Program

Purpose: To establish the requirements for reviewing, conducting, and approving appraisal investigations and feasibility studies under the Rural Water Supply Program (Program). The benefit of this Directive and Standard (D&S) is that it will support consistency and effectiveness in the implementation of the Program through the establishment of uniform Program requirements.

Authority: The Rural Water Supply Act of 2006 (Title I, Pub. L. 109-451; 120 Stat. 3346; 43 U.S.C. 2401 et seq.) and 43 CFR Part 404

Approving Official: Director, Policy and Administration (Policy Director)

Contact: Water and Environmental Resources Division, 84-55000

1. Introduction.

- A. The Rural Water Supply Program is established pursuant to the Rural Water Supply Act of 2006, Title I of Pub. L. 109-451 (the Act). The Act authorizes the Bureau of Reclamation to establish a program to work with rural communities, including tribes, in the 17 Western States to assess rural water supply needs and identify options to address those needs through appraisal investigations and feasibility studies. In November 2008, Reclamation published an interim final rule in the *Federal Register* (43 CFR Part 404) (Rule), establishing comprehensive programmatic criteria for the Program, as required under the Act. The Rule describes the purposes and goals of the Program, establishes an application and review process for making financial assistance determinations, establishes eligibility and prioritization criteria, as well as criteria to evaluate appraisal investigations and feasibility studies. This D&S describes procedural and other requirements that are internal to Reclamation and are, therefore, not addressed in the Rule. There are references throughout the D&S to relevant sections of the Rule, which is attached as Appendix A.
- B. This D&S sets forth the requirements, responsibilities, and review processes for appraisal investigations and feasibility studies conducted under the Program. Other Reclamation requirements concerning appraisal investigations and feasibility studies are described elsewhere in the Reclamation Manual and are generally applicable to the Program to the extent that they are not inconsistent with this D&S.

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

2. **Applicability.** This D&S applies to all activities conducted by Reclamation employees under the Program related to the preparation, review, and approval of appraisal investigations and feasibility studies and appraisal and feasibility reports, including financial assistance for these activities.
3. **Definitions.**
 - A. **Application Review Committee (ARC).** “ARC” means the committee established annually to review all statements of interest and full proposals prepared and submitted by Project Sponsors seeking assistance under the Program. The ARC is comprised of staff members from Reclamation regional offices and other offices as needed. Members are selected annually.
 - B. **Appraisal Investigation or Investigation.** “Appraisal investigation” or “investigation” means the term defined in § 404.2 of the Rule as an analysis of domestic, municipal, and industrial water supply problems, needs, and opportunities in the planning area, primarily using existing data. It includes a preliminary assessment of alternatives to address the identified water supply problems, needs, and opportunities. Its purpose is to determine if there is at least one viable alternative that warrants a more detailed investigation through a feasibility study.
 - C. **Appraisal Report.** “Appraisal report” means the term defined in § 404.2 of the Rule as the document prepared by Reclamation, setting forth the findings and conclusions reached by Reclamation in its evaluation of a completed appraisal investigation. Its purpose is to provide a recommendation on whether a feasibility study should be initiated.
 - D. **Eligible non-Federal Project Sponsor(s) or Project Sponsor(s).** “Eligible non-Federal Project Sponsors” or “Project Sponsors” means the entities determined to be eligible to participate in the Program as described in § 404.6 of the Rule, including:
 - (1) a state or political subdivision of a state, including a department, agency, municipality, county, or other regional or local authority;
 - (2) an Indian tribe or tribal organization, as defined in § 404.2 of the Rule;
 - (3) an entity created under state law that has water management or water delivery authority, including for example, an irrigation or water district, canal company, water users’ association, rural water association or district, a joint powers authority, or other qualifying entity; or

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (4) any combination of the entities listed above, which collectively are referred to as the non-Federal Project Sponsors or the Project Sponsors.
- E. **Feasibility Report.** “Feasibility report” means the term defined in § 404.2 of the Rule as the document prepared by Reclamation, setting forth the findings and conclusions of a completed feasibility study. The purpose of the feasibility report is to provide an Administration recommendation to Congress regarding whether the proposed project should be authorized for construction.
- F. **Feasibility Study or Study.** “Feasibility study” or “study” means the term defined in § 404.2 of the Rule as a detailed investigation requiring the acquisition of primary data and an analysis of a reasonable range of alternatives, including a preferred alternative, to meet identified water supply problems, needs, and opportunities in the planning area. A feasibility study also includes an analysis of the technical and economic feasibility of the proposed project, the impact of the proposed project on the environment in compliance with the National Environmental Policy Act (NEPA) and other applicable environmental laws, and the financial capability of the Project Sponsors to pay the non-Federal share of the costs associated with constructing, operating, and maintaining the project. The completed feasibility study will form the basis for the recommendation to Congress in the feasibility report regarding whether the proposed project should be authorized for construction
- G. **Full Proposal or Proposal.** “Full proposal” or “proposal” means the term described in § 404.20 of the Rule and refers to the detailed scope of work that is prepared in the application process as described in §§ 404.15 and 404.17 of the Rule. A full proposal includes sufficient information to address the eligibility criteria described in §§ 404.6 and 404.7 of the Rule, and the applicable prioritization criteria from § 404.13. The applicable prioritization criteria are provided in Paragraph 7 of this D&S.
- H. **In-Kind Services.** “In-kind services” means the services described in § 404.31 of the Rule that are provided by the Project Sponsors as part of the non-Federal cost-share contribution, including services that Reclamation determines are necessary and reasonable for the conduct or completion of an investigation or study.
- I. **Plan of Study.** “Plan of study” means a fully developed scope of work describing the specific investigation or study tasks and how each task will be carried out, including the responsible party and the approach. The plan of study is more detailed than the proposal and serves as a work plan for the investigation or study. The plan of study is drafted and agreed to by Reclamation and the Project Sponsors after the award of assistance but prior to beginning substantive work on the appraisal investigation or feasibility study, and is updated as conditions warrant.

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- J. **Principles and Guidelines.** “Principles and Guidelines” means the *Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies* as originally established by the Water Resources Council on March 10, 1983, or its successor document, as incorporated by reference in § 404.4 of the Rule.
- K. **Program Coordinator.** “Program Coordinator” means a Reclamation employee assigned by and working for the Policy Director who provides leadership and coordination for the Program on a Reclamation-wide basis.
- L. **Reclamation Standards.** “Reclamation Standards” mean the term used in §§ 404.41 and 404.47 of the Rule and refers to the requirements in this D&S governing the approach, process, and content of an appraisal investigation or a feasibility study conducted under the Program or independently completed and submitted to Reclamation under the Program. It also refers to any requirements in other applicable D&S to the extent that they do not conflict with this D&S.
- M. **Regional Coordinator.** “Regional Coordinator” means the individual selected by a regional director to serve as the region’s primary point of contact with the Program Coordinator on programmatic, Reclamation-wide, and other related activities as assigned.
- N. **Rural Water Supply Project or Project.** “Rural Water Supply Project” or “Project,” as defined in § 404.2 of the Rule, means a project that is designed to serve a community or groups of communities, each of which has a current population of not more than 50,000 inhabitants (unless excepted by Reclamation in accordance with § 404.8 of the Rule), which may include Indian tribes and tribal organizations, dispersed home sites, or rural areas, with domestic, municipal, and industrial water, including noncommercial irrigation of vegetation, and which includes the following or any combination of the following:
- (1) the construction or installation of new rural water supply infrastructure and facilities;
 - (2) the improvement or upgrade of existing rural water supply infrastructure and facilities;
 - (3) the extension of existing rural water supply infrastructure and facilities to reach an increased service area; or

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (4) the interconnection of existing rural water supply infrastructure and facilities currently serving individual communities, dispersed home sites, rural areas, or tribes.
 - O. **Statement of Interest.** “Statement of interest” means a preliminary scope of work for an appraisal investigation that is prepared as part of the assistance application process described in § 404.16 of the Rule.
 - P. **Study Manager.** “Study Manager” means the individual appointed by a regional director to ensure that appraisal investigations or feasibility studies are completed and reviewed in accordance with Reclamation standards and that appraisal or feasibility reports are prepared.
4. **Responsibilities.**
- A. **Commissioner.**
 - (1) The Commissioner will determine the appropriate emphasis of the Program as a mission goal within Reclamation’s overall strategic plan and take such measures as may be necessary for overall implementation of the Program.
 - (2) The Commissioner will be responsible for approving feasibility reports that have been recommended for approval by a regional director and reviewed for program consistency by the Policy Director.
 - B. **Policy Director.**
 - (1) The Policy Director will oversee the implementation of the Program in cooperation with the regional directors. The Policy Director will develop and revise appropriate policies, D&S, and guidelines for the Program.
 - (2) The Policy Director will review the recommended findings of feasibility studies and feasibility reports submitted by the regional directors. The Policy Director’s review will determine whether the study meets the requirements of the Rule and Reclamation policy, as well as ensure that there is consistency across Reclamation in the form and content of reports.
 - (3) The Policy Director will review the appraisal reports recommended for approval by regional directors for program consistency. The Policy Director will be responsible for the final approval of appraisal reports.

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (4) The Policy Director will appoint a Program Coordinator in Policy and Administration to oversee the implementation of the Program and will select, with input from the regional directors, qualified staff to serve on the ARC.
- (5) The Policy Director will review the recommendations of the ARC and make the final selection of appraisal investigations and feasibility studies to be funded as well as the allocation of appropriations.

C. Regional Directors.

- (1) The regional directors will oversee the implementation of the Program within their regions. Within their regions, the regional directors will undertake outreach to inform interested Federal, state, local, and tribal government entities, other stakeholders, Project Sponsors, and the general public about the Program; assist potential Project Sponsors in preparing proposals; undertake or oversee the conduct of appraisal investigations and feasibility studies; review completed investigations and studies; and prepare and certify appraisal and feasibility reports in accordance with Program requirements.
- (2) Within his or her region, the regional director will recommend appraisal reports to the Policy Director for review and final approval.
- (3) The regional directors will appoint a Regional Coordinator to serve as the primary point of contact with the Program Coordinator. The regional director or his or her designee may appoint Study Managers or teams to work with Project Sponsors and to oversee the conduct and review of investigations and studies within the region.

D. Program Coordinator. The Program Coordinator will provide leadership and coordination for the Program on a Reclamation-wide basis, including working with the Regional Coordinators to resolve issues related to Program implementation and to ensure that the Program is implemented consistently in an effective and efficient manner. The Program Coordinator will:

- (1) provide advice and information regarding Program policies and procedures;
- (2) develop Program performance measures;
- (3) develop and maintain Program websites and other informational materials;
- (4) oversee the review of proposals by the ARC;

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (5) formulate budgets and track the expenditure of Program funding;
- (6) coordinate review and concurrence of appraisal and feasibility reports through the Commissioner;
- (7) track the status of activities funded under the Program;
- (8) formulate and coordinate the development and publication of annual funding opportunity announcements; and
- (9) ensure that input about the Program is solicited and received on a regular basis from Project Sponsors, potential Project Sponsors, other stakeholders, and the general public.

E. **ARC.** The ARC will:

- (1) review for eligibility and rank all statements of interest and proposals submitted by potential Project Sponsors seeking assistance under the Program in accordance with Program criteria;
- (2) assess proposed cost-share allocations for conducting an investigation or study;
- (3) assess the qualifications of a potential Project Sponsor to conduct an investigation or study and determine whether it is cost effective for a potential Project Sponsor or its contractor to conduct an investigation or study; and
- (4) make a recommendation to the Commissioner regarding how appropriations should be allocated to conduct the highest priority investigations and studies determined eligible for assistance, including any reduction of non-Federal cost-share contributions.

F. **Regional Coordinator.** The Regional Coordinator will serve as the primary point of contact with the Program Coordinator on programmatic, Reclamation-wide activities. Within his or her region, the Regional Coordinator will be responsible for:

- (1) formulating the budget requests for reviews of independently conducted investigations and studies;
- (2) tracking and reporting to the Program Coordinator on the status of investigations, studies, and reviews, including related Program expenditures;

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (3) working in cooperation with the Program Coordinator to ensure that the Program is implemented efficiently and consistently;
- (4) providing input on policy and Program implementation issues as they arise;
- (5) ensuring that input about the Program is solicited and received on a regular basis from Project Sponsors, potential Project Sponsors, and the general public in his or her region;
- (6) coordinating with and providing assistance to the Study Managers; and
- (7) providing copies of individual financial assistance agreements to the Program Coordinator.

G. **Study Managers.** The Study Managers will oversee the conduct and review of investigations and studies assigned to them. In most circumstances, the Study Manager will be the primary point of contact for potential Project Sponsors and will take the lead to ensure that selected investigations or studies are completed and reviewed, and that reports are prepared in accordance with Program requirements. The Study Manager will also coordinate with the Project Sponsor throughout the conduct of the investigation or study to ensure that the plan of study is updated to account for unforeseen conditions or circumstances, and variations in work progress.

5. **Program Budgeting.**

A. **General Approach.** The Policy Director will formulate the primary budget request for the Program, as described in Paragraph 5.B. Additionally, each region will prepare a budget request to include funding for outreach and administrative costs associated with Program implementation within the region as described in Paragraph 5.C.

B. **Policy Budget Request.** The budget request formulated by the Policy Director will include funds for:

- (1) the Federal share of the cost to assist with the preparation of proposals, conduct or review investigations or studies, and the cost to prepare appraisal and feasibility reports;
- (2) the salary of the Program Coordinator;
- (3) all costs associated with financial assistance support for Program implementation;
- (4) all costs associated with the ARC; and

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

(5) other Reclamation-wide Program activities.

- C. **Regional Budget Request.** Regional budgets will include funding for the administrative cost of staff to implement the Program within the region, including funding for the Regional Coordinators, and funding for regional and area office staff. Administrative costs to implement the Program include Program promotion, outreach with potential Project Sponsors, and reporting on Program accomplishments. The administrative costs of conducting or reviewing an investigation or study, such as complying with financial reporting requirements and reporting on the status of the investigation or study, will be included in the Federal share of the investigation or study cost.

6. **Application and Selection Process for Assistance.**

A. **In General.** Under the Program, Reclamation will:

- (1) conduct an appraisal investigation or a feasibility study on behalf of and in cooperation with a Project Sponsor (see § 404.11(a) of the Rule);
- (2) provide financial assistance to Project Sponsors to conduct an appraisal investigation or a feasibility study themselves or through a contractor (see § 404.11(b) of the Rule); and
- (3) review and evaluate investigations and studies independently completed by potential Project Sponsors without assistance under the Program and submitted to Reclamation (see § 404.11(c) of the Rule).

B. **Review and Selection Process.** The Rule contains a detailed description of the application and selection process for provision of assistance under the Program, including a description of the eligibility requirements (§§ 404.6 to 404.10), the types of assistance available (§§ 404.11), and Reclamation's process for receiving and reviewing requests for assistance (§§ 404.13 to 404.27). The Rule establishes one application and review process for requests to conduct an appraisal investigation or a feasibility study under the Program and a separate process for requests for Reclamation to review and approve an independently completed investigation or study. The steps that Reclamation will take to implement these two selection processes are described separately, as follows:

- (1) **Requests for Reclamation Assistance to Conduct or Provide Financial Assistance for an Investigation or Study.** Reclamation's application and review process for requests for assistance to conduct or provide financial assistance for an investigation or study under §§ 404.11(a) and (b) of the Rule is as follows:

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (a) **Prepare and Post Funding Opportunity Announcement (FOA).** The Program Coordinator, in consultation with the Regional Coordinators, will prepare a FOA during each year in which program funds are available for award to new applicants, seeking statements of interest from eligible applicants interested in assistance under the Program. This FOA will be posted by a Reclamation Grants Officer.
- (b) **Establish the ARC.** The Policy Director will select the members of the ARC prior to the FOA deadline.
- (c) **Review Statements of Interest.** The ARC will review submitted statements of interest for eligibility (see §§ 404.6 and 404.7 of the Rule) and priority (see § 404.13 of the Rule) to determine whether the proposed investigation or study merits completion of a full proposal. See § 404.16 of the Rule.
- (d) **Notify Applicants of Status.** A Reclamation Grants Officer, in consultation with the Policy Director, will notify all applicants whether or not to submit a full proposal and the deadline for submittal of a full proposal.
- (e) **Prepare the Full Proposal.** Reclamation will assist and coordinate with the Project Sponsors on the preparation of the full proposal as requested. Reclamation and the Project Sponsors will each pay their own costs incurred in preparation of the proposal.
- (f) **Determine Project Sponsor Qualifications to Conduct an Investigation or Study and Cost Effectiveness.** Project Sponsors seeking Program funding to conduct an investigation or study themselves, or through a contractor, will be required to submit qualifications or resumes for Reclamation review as part of their full proposal as described in § 404.20 of the Rule. The ARC will review the resume to determine whether the Project Sponsor(s) or their contractor(s) have appropriate technical capabilities and experience as described in § 404.23 of the Rule. The ARC will also determine whether it is cost effective for the Project Sponsor(s) or their contractor(s) to conduct the investigation or study as described in § 404.24 of the Rule.
- (g) **Review Full Proposals.** The ARC will review the full proposals, rank them in order of priority using the applicable criteria from the Rule (see Paragraph 7) and make funding recommendations to the Commissioner, taking into consideration the available level of Program appropriations.

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (h) **Transmit for Commissioner Approval.** The Policy Director will transmit the ARC's recommendations to the Commissioner, who will provide final approval of the investigations and studies to be awarded financial assistance.
 - (i) **Develop Plan of Study and Enter into Financial Assistance Agreement.** Once an investigation or study has been selected for funding, Reclamation and the Project Sponsor(s) will enter into the appropriate agreement (e.g., grant, cooperative agreement, Indian Self-Determination Act agreement, etc.) setting forth the terms applicable for the funded activity. The agreement will include, but is not limited to: the plan of study, which will be developed jointly by Reclamation and the Project Sponsor(s); cost-share requirements, as applicable; and the responsibilities of the parties. A Reclamation Grants Officer will collaborate with the Project Sponsor(s) to prepare the appropriate financial assistance agreement for signature by Reclamation and the Project Sponsor(s).
- (2) **Requests for Reclamation to Review an Independently Completed Investigation or Study.** As explained in § 404.25 of the Rule, requests for Reclamation to review an independently completed investigation or study must be submitted directly to the local Reclamation office; Project Sponsors are not required to submit a statement of interest in response to a FOA. The request must include the independently completed investigation or study and a cover letter addressing the eligibility and applicable prioritization criteria (described in §§ 404.6, 404.7, and 404.13 of the Rule and Paragraph 7 of this D&S). Reclamation's process for reviewing an independently completed investigation or study is as follows:
 - (a) **Acknowledge Receipt.** Upon receipt of an independently completed investigation or study for review, the receiving office will provide written acknowledgement of its receipt to the Project Sponsors along with a stated timeframe to assess completeness.
 - (b) **Review Request.** Reclamation will take the following steps to review independently completed investigations or studies:
 - (i) **Determine whether the Independently Completed Investigation or Study is Eligible for Review.** The receiving office will review the request and make a determination as to whether the independently completed investigation or study meets the eligibility criteria described in §§ 404.6 and 404.7 of the Rule and applicable prioritization criteria described in § 404.13 and Paragraph 7 of this D&S and will request that Regional and Program Coordinators concur with that determination.

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

Independently completed investigations or studies will be reviewed as they are submitted and will not be collectively ranked by the ARC.

- (ii) **Determine whether the Independently Completed Investigation or Study is Complete and Ready for Review.** Reclamation will review the independently completed investigation or study within 90 days from the date it is received by Reclamation to determine whether it contains all of the required information and is, therefore complete, and ready for review in accordance with § 404.43 (investigations) and § 404.48 (studies) of the Rule. If the independently completed investigation or study is determined to be incomplete, the Project Sponsor will make the necessary revisions at its own expense and resubmit it to Reclamation, or may elect to prepare a full proposal to correct the deficiencies using Program funding. This full proposal will then be ranked against all other proposals during the next application cycle.
- (iii) **Review for Technical Adequacy.** If the independently completed investigation or study is determined to be complete, Reclamation will conduct a review for technical adequacy in accordance with the requirements in Paragraph 9.B.(2)(b) of this D&S.
- (iv) **Review Environmental Information Contained in an Independently Completed Feasibility Study.** Reclamation will review the environmental information contained in an independently completed feasibility study to determine whether it is sufficiently complete for Reclamation to prepare an environmental assessment and a Finding of No Significant Impact, as part of the NEPA compliance process, if that level of analysis is determined to be appropriate. If the environmental information is incomplete, Reclamation will follow the process described in Paragraph 6.B.(2)(b) to provide an opportunity for the Project Sponsors to correct the deficiencies. If Reclamation determines that an environmental impact statement (EIS) will be required for the proposed project, Reclamation will inform the Project Sponsors that they may prepare a full proposal to request that Reclamation conduct an EIS, or request funding to have the EIS prepared by a contractor selected by Reclamation¹. The full proposal will then be ranked against all other proposals during the next application cycle.

¹Reclamation cannot lawfully adopt an EIS that has been prepared without Reclamation prior involvement because of the many inherently Federal roles and responsibilities associated with the EIS process (see 43 CFR 1506.5 (c) and 43 CFR 46.200).

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (c) **Notify Applicants of Status.** The receiving office will notify the Project Sponsors in writing whether the independently conducted investigation or study is complete and qualifies for review under the Program. In this notification, the receiving office will identify any applicable non-Federal cost share required to conduct the review and will state whether Federal appropriations are available to cover Reclamation's share of the review costs. If Federal funds are not available, the Project Sponsor(s) will contribute funding for Reclamation's share of the review costs as described in Paragraph 8.B.(3) of this D&S.
 - (d) **Enter into Financial Assistance Agreement.** If a cost share is required to complete the review, Reclamation and the Project Sponsor(s) will enter into the appropriate agreement (e.g., grant, cooperative agreement, or Indian Self-Determination Act agreement), setting forth the terms applicable for the funded activity. The agreement will include, but is not limited to: the plan of study; cost-share requirements, as applicable; and the responsibilities of the parties. A Reclamation Grants Officer will collaborate with the Project Sponsor(s) and prepare the appropriate financial assistance agreement for signature by Reclamation and the Project Sponsor(s).
7. **Prioritization Criteria.** The applicable prioritization criteria that Reclamation will use to evaluate requests for assistance under the Program are listed below. Weights will be assigned to the criteria and published in the FOA.
- A. The extent to which the proposal demonstrates an urgent and compelling need for a rural water supply project, primarily for domestic, residential, and municipal uses², due to present or projected future:
 - (1) shortages of water supply, and/or
 - (2) violations of drinking water standards, and/or
 - (3) inadequacies in the infrastructure available to distribute water for domestic, residential, and municipal uses in sufficient quantities and pressures to protect public health and safety.

²While water supply for industrial uses, including commercial livestock operations, are allowable under the program, study proposals for investigations of projects designed to provide a substantial amount of industrial use water will score relatively lower on this criterion in comparison to proposals for investigations of projects that will provide water primarily for domestic, residential, and municipal uses.

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- B. The extent to which the proposal demonstrates that the rural water supply investigation or study will incorporate a regional or watershed perspective, as defined in §404.2 of the Rule, in examining future water supply needs and solutions to those needs which take advantage of economies of scale to meet the needs of a geographically dispersed community or group of communities.
 - C. The extent to which the proposal demonstrates that an investigation or study will address the rural water supply needs of an Indian tribe or tribes.
 - D. The extent to which the proposal demonstrates that project sponsors need financial assistance with the planning of a rural water supply project as demonstrated by readily available local and regional economic indicators.
 - E. Whether the proposal demonstrates that the investigation or study will avoid programmatic overlap with other Federal programs because those programs could not fund all components of the planning and construction of the entire rural water supply project to be investigated.
 - F. The extent to which the proposal demonstrates that the rural water supply study supports a State, tribal, or local government's water management priorities.
8. **Cost Sharing.**
- A. **In General.** The Rule contains a detailed description of the cost-sharing requirements for investigations and studies funded under the Program in §§ 404.30 to 404.40. In summary, the Rule provides that, subject to available appropriations, Reclamation will pay 100 percent of the cost of conducting an appraisal investigation up to \$200,000 and requires Project Sponsors to contribute 50 percent of any investigation costs exceeding \$200,000. See § 404.30 of the Rule. Regarding feasibility studies, the Rule provides that Reclamation will pay 50 percent of the study costs and requires Project Sponsors to pay the remaining 50 percent of study costs. See § 404.33 of the Rule.
 - B. **Identification of Costs Subject to Cost-Sharing Requirements.**
 - (1) **Costs Incurred in Conducting Appraisal Investigations and Feasibility Studies.** Reclamation is responsible for determining the specific costs to be subject to cost sharing for a particular investigation or study and for memorializing those costs in an appropriate financial assistance agreement. In general, all costs directly associated with an investigation or study will be subject to the cost-sharing requirements described in §§ 404.30 to 404.40 of the Rule, including, but not limited to:

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (a) all costs directly related to conducting the investigation or study, including costs incurred by Reclamation and the Project Sponsor(s) or their contractors;
 - (b) the cost to perform all required environmental analysis;
 - (c) the cost of performing a design, estimating, and construction (DEC) review, value engineering analysis, and report certification for feasibility studies, if applicable; and
 - (d) all costs for Reclamation to review investigations and studies, including costs for providing any additional information or making corrections, and to prepare appraisal and feasibility reports.
- (2) **Administrative and Program Costs.** In general, all costs that are not directly associated with an investigation or study, including costs associated with Program implementation and administration shall be paid for by Reclamation without requiring any non-Federal cost-share contributions.
- (3) **Cost-Sharing Requirements for Reclamation's Review of Independently Completed Appraisal Investigations or Feasibility Studies.**
- (a) **Independently Completed Appraisal Investigations.** Contingent upon the availability of funds, Reclamation will use Federal appropriations or contributed funds to pay 100 percent of the cost (up to \$200,000) incurred by Reclamation to review an independently completed investigation (without assistance under the Program) submitted for review by a potential Project Sponsor and the cost for Reclamation to prepare an associated appraisal report. If the cost exceeds \$200,000, the potential Project Sponsor will be required to cost share 50 percent of the amount exceeding \$200,000. In the absence of sufficient Federal appropriations to perform these functions, Reclamation is authorized to accept funds from the potential Project Sponsor pursuant to the Contributed Funds Act. However, Reclamation will not reimburse the Project Sponsor for the contributed funds from current year or future appropriations.
 - (b) **Independently Completed Feasibility Studies.** The cost incurred by Reclamation to review an independently completed feasibility study (without assistance under the Program) submitted for review by a potential Project Sponsor and the cost to prepare an associated feasibility report will be cost shared between Reclamation and the potential Project Sponsor on a 50/50 basis. If available, Reclamation will use Federal appropriations to pay for

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

the Federal share of these costs. In the absence of sufficient Federal appropriations to perform these functions, Reclamation is authorized to accept funds from the potential Project Sponsor pursuant to the Contributed Funds Act. In general, the following shall be considered study costs to be cost shared by Reclamation and the potential Project Sponsor:

- (i) the cost of Reclamation staff time to review the independently completed feasibility study and to request additional information, as needed;
- (ii) the cost to review any environmental information submitted for possible use by Reclamation during NEPA compliance;
- (iii) the cost of performing a DEC review, value engineering analysis, and report certification for feasibility studies, if applicable; and
- (iv) the cost of preparing the feasibility report.

- (c) **Corrections.** If corrections to an independently completed investigation or study are needed, the Project Sponsor(s) will either pay for the corrections themselves or collaborate with Reclamation to prepare a full proposal to correct the deficiencies through the Program.

- C. **Non-Federal Cost-Share Contributions.** The non-Federal cost share for an investigation or study must be provided in the form of cash or in-kind services that Reclamation determines are necessary and reasonable to conduct and complete the investigation or study. See § 404.31 of the Rule.
- D. **Inclusion of Federal (non-Reclamation) Loans as Part of non-Federal Cost-Share Contribution.** The Project Sponsor(s) may use funds obtained through an appropriate Federal loan to pay for all or part of their cost-share contribution provided that the loan will be fully repaid with interest in accordance with the terms and conditions of the loan agreement.
- E. **Reduction of the Non-Federal Cost-Share Contribution Required for an Investigation or Study.** Sections 404.32 (appraisal investigations) and 404.34 (feasibility studies) of the Rule provide that Reclamation has the discretion to reduce the non-Federal cost share if Reclamation determines that there is an overwhelming Federal interest in conducting the investigation or study, the non-Federal cost-share partner demonstrates financial hardship, and Reclamation consults with any other Federal agencies that are partners in the project and determines that a reduction in the non-Federal cost share is appropriate.

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (1) **Overwhelming Federal Interest.** Reclamation will make a determination of whether an overwhelming Federal interest exists based on factors such as the programs and policies of the President and the Secretary of the Department of the Interior.
 - (2) **Financial Hardship.** The Project Sponsors seeking a reduction of their cost share have the burden of demonstrating that they are unable to pay all or a portion of their share due to financial hardship. In determining whether this burden has been met, Reclamation will use readily available economic indicators and data that is representative of the study area, as listed below, and which will be provided by the Project Sponsors. Appendix B provides a more detailed description.
 - (a) average household size within the study area;
 - (b) median household income within the study area and the state;
 - (c) family poverty level for the state as estimated by guidelines published annually by the Department of Health and Human Services; and
 - (d) the unemployment rate within the study area and the national average unemployment rate as reported by the Bureau of Labor Statistics.
- F. **Cost Share for Communities with More than 50,000 Inhabitants.** Sections 404.8 and 404.35 of the Rule provide that a community with a population in excess of 50,000 inhabitants may be part of an eligible rural water project if Reclamation determines that the community is a critical partner whose involvement substantially contributes to the financial viability of the proposed project. Reclamation will determine the cost share for communities with a population greater than 50,000 based on the financial strength of the community by evaluating all applicable credit or bond ratings (e.g., ratings provided by services such as Moody's, Standard and Poor's, and Fitch) and the incremental study costs attributable to the community's participation in the investigation or study. The methodology that will be applied in making this determination is described in detail in Appendix C.
9. **Process for Reviewing Appraisal Investigations or Feasibility Studies.** Reclamation will undertake the following steps to review an investigation or study.
- A. **Review Schedule.**
- (1) **Appraisal Investigations.** Reclamation has a total of 180 business days to complete its review of an appraisal investigation, whether completed under the

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

Program or independently, which is comprised of 90 business days to determine whether the investigation is complete and 90 business days to complete a technical adequacy review and prepare and approve an appraisal report. See §§ 404.43 to 404.46 of the Rule.

- (2) **Feasibility Studies.** Reclamation has a total of 270 business days to review a feasibility study, whether completed under the Program or independently, which is comprised of 90 business days to determine if it is complete and 180 business days to conduct a technical adequacy review, prepare a feasibility report, and submit it to Congress. This time period includes completing all necessary Reclamation reviews, but does not include any reviews conducted by the Department, the Office of Management and Budget (OMB), or other agency.
- (3) **Corrections.** The review schedules exclude the time required for the Project Sponsor(s) to correct deficiencies or respond to Reclamation's requests for additional information.

B. **Steps for Reclamation Review.** Reclamation will take the following steps to review completed investigations or studies:

- (1) **Determining Whether an Investigation or Study is Complete and Ready to Review.** The Study Manager will review the investigation or study, determine whether it contains all of the required information and is therefore complete and ready for review in accordance with § 404.43 (investigations) and § 404.48 (studies) of the Rule, and will notify the project sponsor of the determination within 90 days from the date the investigation or study is completed or received by Reclamation.
- (2) **Reviewing for Technical Adequacy.** The Study Manager will establish a team of technical experts to conduct the review of the investigation or study.
 - (a) **Appraisal Investigations.** Reclamation will review the investigation for technical adequacy, in accordance with the timeframe and criteria in § 404.44 of the Rule, to determine whether it is appropriate to proceed to a feasibility study.
 - (b) **Feasibility Studies.** Reclamation will review the study in accordance with the timeframe and criteria in § 404.49 of the Rule, to determine whether to recommend to Congress that the project be authorized for construction. The review for technical adequacy will include:

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (i) a review of the study to determine whether it meets the criteria in § 404.49 of the Rule;
 - (ii) a review of all documentation of the analyses required to comply with NEPA;
 - (iii) a DEC review, if applicable. The regional director will identify feasibility studies to be submitted for independent oversight and review under the direction of the Senior Advisor, DEC, in accordance with Reclamation Manual (RM) Policy, *Independent Oversight of Design, Cost Estimating, and Construction*, FAC P10, and RM D&S, *Identifying Design, Cost Estimating, and Construction Projects for which Independent Oversight Review is Required, and Performing those Reviews*, FAC 10-1; and
 - (iv) Value Analysis, if applicable, to be conducted in accordance with RM Policy, *Reclamation Value Program*, CMP P05, and RM D&S *Reclamation Value Program*, CMP 06-01.
- (3) **Addressing Corrections.** If it is determined that the investigation or study requires additional work, the Project Sponsor(s) will be provided an opportunity to correct or supplement the investigation or study.
 - (4) **Preparing the Report.** The Study Manager will prepare the appraisal or feasibility report and submit it to the regional director for approval and, as appropriate, for certification in accordance with Report Certification requirements in Temporary Reclamation Manual Release (TRMR) Policy, *Certification of Select Water Resources Management Reports*, FAC TRMR-22 and TRMR D&S, *Performing Certification of Select Water Resources Management Reports*, FAC TRMR-23.

C. Approval of Appraisal or Feasibility Reports.

- (1) **Appraisal Reports.**
 - (a) **Review by Policy Director.** The regional director will submit the appraisal report to the Policy Director for review and approval. The Policy Director will review the report that is submitted by the regional director to address any policy issues and to ensure that there is consistency across Reclamation in the form and content of reports. Once the review is complete, the Policy Director will request that the appropriate regional director make changes or submit additional information if determined to be necessary.

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (b) **Notify Project Sponsor(s) of Status.** The Study Manager will notify the Project Sponsor(s) of the findings in the report once it is approved by the Policy Director. If the appraisal report recommends proceeding to a feasibility study, the Study Manager will work with the Project Sponsor(s) to prepare a full study proposal. The proposal will be considered by the ARC during the next funding cycle.

(2) **Feasibility Reports.**

- (a) **Review by Directors.** The regional director will submit the feasibility report to the Policy Director for review and concurrence with the recommendations of the regional director. The Policy Director will review the report that is submitted by the regional director to address any policy issues and to ensure that there is consistency across Reclamation in the form and content of reports. Once the review is complete, the Policy Director will transmit the report to the Commissioner along with a draft transmittal memorandum, for the Commissioner's approval signature.
- (b) **Review by the Commissioner.** If the Commissioner approves the feasibility report, the Commissioner will sign a memorandum transmitting the report to the Department.
- (c) **Review by the Department.** The Department will review the report and transmit it to the OMB.
- (d) **Review by OMB.** OMB will review the report to determine whether the proposed project is consistent with the policies and programs of the President, as provided in § 404.51 of the Rule.
- (e) **Finalize Report.** If approved by OMB, Reclamation will finalize the feasibility report.
- (f) **Notify Project Sponsor(s) of Status.** The regional director will notify the Project Sponsor(s) whether the feasibility report was approved by OMB.
- (g) **Notice of Availability of the Report.** The Policy Director will publish a notice in the *Federal Register* about the availability of the report. See § 404.52(d) of the Rule.
- (h) **Submit Report to Congress.** The Commissioner will transmit the report to the Assistant Secretary for Water and Science for submission to Congress.

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

10. **Appraisal Investigation Standards.** The following are Reclamation's standards for preparing an appraisal investigation that are referenced in § 404.41 of the Rule. All investigations must adhere to these standards, including those conducted under the Program or independently. Appraisal investigations and appraisal reports are the basis for a decision on proceeding to a feasibility study and must be organized to lead decisionmakers and the public to the study's conclusions and recommendations.
- A. **Coordination and Consultation.** The Study Manager and Project Sponsor(s) must jointly develop and agree on a process to conduct appropriate consultation and coordination efforts with stakeholders and interested parties as follows:
- (1) The public must be informed that the investigation is being conducted and be provided an opportunity to comment on the investigation and its findings and recommendations.
 - (2) Appropriate coordination and consultation with Federal, state, tribal, regional, and local authorities and entities must be conducted to ensure that the proposed project is not duplicative of other efforts and that technical expertise and existing data are utilized to the maximum extent possible. The coordination and consultation must ensure that all relevant previous studies, analyses, and information are considered and integrated into the investigation.
- B. **Appraisal Investigation Content.** An appraisal investigation must be completed within 2 years of its initiation. Consideration of all of the prioritization criteria found in § 404.13 of the Rule must be integrated into the appraisal investigation. An appraisal investigation must address the following:
- (1) **Introduction.** The introduction briefly describes the water supply problems, needs, and opportunities; the objectives, scope, and purpose of the investigation; the region, watershed, and study area; Project Sponsor(s) and partners; and other previous or ongoing studies related to the problem being investigated, including any conclusions reached. Study objectives must be broadly defined to avoid dictating a specific or narrow range of alternatives. The scope of the investigation must be scaled relative to the size, complexity, cost, and degree of controversy surrounding the proposed project, as referenced in § 404.29 of the Rule.
 - (2) **Resources.** An inventory will be compiled of present and projected future resource conditions that will have a bearing on plan formulation to meet the identified problems, needs, and opportunities regarding the proposed project.
 - (3) **Statement of Problems, Needs, and Opportunities.** A clear statement will be prepared regarding the present and future water supply problems, needs, and

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

opportunities to be addressed. This statement will describe how the problems, needs, and opportunities were translated into planning statements and objectives as well as any constraints that were imposed on the alternatives identified in the appraisal investigation. The statement will address:

- (a) the significance of the problem and its impact on domestic, municipal, or industrial uses of the water resources and supplies as well as impacts on demand within the study area, region, or watershed;
 - (b) any threats to public health and safety caused by the existing water supply or system as well as the benefits to be gained by the proposed project;
 - (c) how the proposed project will meet the near- and long-term water demands in the area, including the demand for domestic, municipal, and industrial water supplies, and the demand for incidental noncommercial livestock watering and noncommercial irrigation of vegetation, if any; and
 - (d) the current source of water supply and any new water supplies that would be used in the proposed project, including opportunities to treat and use low-quality or nonpotable water, water reuse-based supplies, and brackish and saline waters, through innovative and economically viable treatment technologies.
- (4) **Plan Formulation and Alternative Analysis.** Alternatives considered in resolving the identified problem or meeting needs or opportunities must be described, analyzed, and compared. A description of how alternatives would address the project objectives and relate to the Principles and Guidelines must be included. In addition, the viability, completeness, effectiveness, and efficiency of each alternative must be assessed and described.
- (a) **No Action Alternative.** The actions that would most likely be taken within the study area during the period of analysis (planning horizon) to address the identified problems, needs, or opportunities if the proposed project is not constructed must be described, including the estimated cost of those actions and the projected result of the No Action Alternative. The risks and uncertainties associated with this alternative must be addressed along with the implications if nothing is done.
 - (b) **Viable Alternatives.** Alternatives that were considered, including the alternatives proposed for further analysis, to address the problem and meet the needs must be described in comparative detail. This analysis must include:

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (i) a detailed description of the structural and nonstructural features of each alternative, including maps, drawings, photographs, and associated narratives;
 - (ii) identification of viable and practical water supplies and rights to support the project needs, including improving existing lower quality waters, conservation, and reuse;
 - (iii) description of benefits for each alternative that will have a positive effect on public health and safety, meet existing and projected future water demand, and the environmental benefits attributable to the alternative, including the benefits of source water protection, described quantitatively when possible, or as a range;
 - (iv) cost estimates that are reasonable and supported at an appraisal level of detail;
 - (v) analysis of the ability of the Project Sponsor(s) and partners to cost share on the capital cost of the project and to pay 100 percent of the annual operating, maintenance, and replacement (OM&R) costs, and identification of costs that are based on comparable quantities of water supplied and population served for each alternative investigated;
 - (vi) a brief analysis of potential environmental, cultural resources, and social impacts of the alternatives that affect the potential for further study and project implementation;
 - (vii) identification of aspects of the alternative that apply a regional or watershed approach to promoting benefits, implementing integrated resource management, and enhancing water management flexibility; and
 - (viii) identification and description of be the project features that will minimize or reduce energy use and water consumption, as well as those features that will use renewable energy.
- (c) **Nonviable Alternatives.** Alternatives that were considered and deemed nonviable must be identified and briefly described. The reason(s) that the alternatives were not considered viable and not further investigated must be clearly explained.

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (d) **Proposed Alternatives.** The viable alternatives that are proposed and recommended for development of a feasibility study must be identified, described, and compared.
 - (5) **Recommendation.** The appraisal investigation must clearly describe at least one viable alternative in order to recommend that a feasibility study be conducted. If recommending a feasibility study, the alternatives to be examined must be described in detail. If no viable alternatives are identified, the project will not be studied further under the Program, and the report will document that finding.
11. **Appraisal Report.** The appraisal report will include Reclamation's finding as to whether it is appropriate to proceed to a feasibility study based on the criteria in § 404.44 of the Rule.
12. **Feasibility Study Standards.** The following are Reclamation's standards for preparing a feasibility study that are referenced in § 404.47 of the Rule. All studies must adhere to these standards, including those conducted under the Program or independently. Feasibility studies require a high level of analysis and detail on the engineering, hydrologic, geologic, economic, social, environmental, and financial implications of the proposed project and the alternatives evaluated. This includes a rigorous analysis based upon the Principles and Guidelines concurrent with a comprehensive analysis of environmental and cultural resources impacts in compliance with NEPA. The requirements for completing a feasibility study under the Program are similar or identical to those required by Reclamation for other proposed projects. A unique aspect of this Program is the requirement to demonstrate capability to pay for domestic, municipal, and industrial water as part of the feasibility study. Feasibility studies, whether conducted or reviewed by Reclamation, will meet the requirements of RM D&S, *Feasibility Studies*, CMP 05-02, unless noted otherwise.
- A. **Prerequisites.** Prerequisite requirements to obtain assistance to conduct a feasibility study are described in detail in §§ 404.19 and 404.26 of the Rule. A feasibility study will not be undertaken unless an appraisal investigation and report have been completed and the appraisal report recommends that a feasibility study is justified.
 - B. **Consultation and Cooperation.** The Study Manager and Project Sponsor(s) must jointly develop and agree on a process to conduct appropriate consultation and coordination efforts with stakeholders and interested parties as follows:
 - (1) The public must be informed that the study is being conducted and be provided an opportunity to comment on the study and its findings and recommendations.
 - (2) Appropriate coordination and consultation with Federal, state, tribal, regional, and local authorities and entities must be conducted to ensure that the proposed project is not duplicative of other efforts and technical expertise and existing data

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

are utilized to the maximum extent possible. The coordination and consultation must ensure that all relevant previous studies, analyses, and information are considered and integrated into the study.

C. **Feasibility Study Content.** The scope of the feasibility study will be scaled relative to the size, complexity, cost, and degree of controversy surrounding the proposed project, as referenced in § 404.29 of the Rule. Consideration of all of the prioritization criteria found in § 404.13 of the Rule must be integrated into the feasibility study. A feasibility study must address the following:

- (1) **Introduction.** The study must include the following introductory information:
 - (a) identification of the Project Sponsor(s) and any partners;
 - (b) description of the study area and maps showing the proposed project area;
 - (c) discussion of how the proposed project incorporates a regional or watershed approach; and
 - (d) a brief discussion of the appraisal investigation and any other prior studies related to the proposed project or that identify water supply problems, needs, and opportunities in the study area, including the conclusions reached.
- (2) **Resources.** An inventory will be compiled of present and projected future resource conditions that will have a bearing on plan formulation to meet the identified problems, needs, and opportunities regarding the proposed project.
- (3) **Statement of Problems, Needs, and Opportunities.** A statement of the present and future water supply problems, needs, and opportunities that the proposed rural water supply project is intended to address will be prepared. This statement will describe how the problems, needs, and opportunities were translated into planning statements and objectives as well as any constraints that were imposed on the alternatives identified in the appraisal investigation. The statement will address:
 - (a) the significance of the problem and its impact on domestic, municipal, or industrial uses of the water resources and supplies and impacts on demand within the study area, region, or watershed;
 - (b) any threats to public health and safety caused by the existing water supply or system and the benefits to be gained by the proposed project;

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (c) how the proposed project will meet the near and long-term water demands in the area, including the demand for domestic, municipal, and industrial water supplies, and the demand for incidental noncommercial livestock watering and noncommercial irrigation of vegetation, if any; and
- (d) the current source of water supply and any new water supplies that would be used in the proposed project, including opportunities to treat and use low-quality or nonpotable water, water reuse-based supplies, and brackish and saline waters, through innovative and economically viable treatment technologies.

D. Formulation, Evaluation, and Comparison of Alternative Plans. Alternatives considered in resolving the identified problem or meeting needs or opportunities must be described, analyzed, and compared. A description of how alternatives would address the project objectives and relate to the Principles and Guidelines must be included. In addition, the viability, completeness, effectiveness, and efficiency of each alternative must be assessed and described. The number and diversity of alternatives developed at this stage will determine the alternatives analyzed under NEPA. The feasibility study must describe each of the alternatives considered, including the following:

- (1) **No-Action Alternative.** Describe the actions that would most likely be taken within the study area during the period of analysis (planning horizon) to address the identified problems, needs, or opportunities if the proposed project is not constructed, including the estimated cost of those actions and the projected result of the No-Action Alternative. The risks and uncertainties associated with this alternative must be addressed along with the implications if nothing is done.
- (2) **Viable Alternatives.** Describe each of the alternatives (structural and nonstructural) that would accomplish the objectives to be addressed by the proposed project, including the preferred alternative, in a comparable level of detail. For each viable alternative considered in the feasibility study, including the preferred alternative, the following information must be included:
 - (a) Detailed descriptions of the structural and nonstructural features, including maps, drawings, photographs, and associated narratives.
 - (b) Identification of viable and practical water supplies and rights to support the project needs, including improving existing lower quality waters, conservation, and reuse.

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (c) A description and economic analysis of the project costs and benefits, in accordance with the procedures set forth in the Principles and Guidelines for municipal and industrial supply projects.
- (d) A detailed, well-documented engineering project cost estimate, including nonconstruction costs and life cycle costs in accordance with RM Policy, *Cost Estimating*, FAC P09; RM D&S, *Cost Estimating*, FAC 09-01; RM D&S, *Construction Cost Estimates and Project Cost Estimates*, FAC 09-02; and RM D&S, *Representation and Referencing of Cost Estimates in Bureau of Reclamation Documents Used for Planning, Design, and Construction*, FAC 09-03. The cost estimate must be based on quantities and unit prices, and clearly identify costs for major structures, facilities, or other types of construction.
- (e) The projected long-term OM&R costs, including staffing levels.
- (f) Identification of the anticipated schedule for funding and construction of the project, including a breakout of Federal and non-Federal funding by year and a list of the anticipated project construction sequence, including all major milestones.
- (g) Identification of all design standards and methods used to determine location, size, and types of major facilities and appurtenances, including source water development; treatment, transmission, and distribution facilities; storage infrastructure; and treatment methods to maintain water quality.
- (h) Identification of the design life of the project used to define the water supply needs, which will be a minimum of 40 years, but will not exceed 100 years, for population projections and life cycle cost analyses, using same design life to evaluate each alternative.
- (i) Analysis of the system hydraulics using an appropriate hydraulic model, including points of delivery, flow rates, pipeline plan layout, and hydraulic grade profiles.
- (j) A geology report that characterizes the general geologic conditions that exist throughout the project area in sufficient detail to determine the general excavation and grading requirements, the likelihood of encountering problem soils or groundwater, and the availability of suitable fill materials and aggregate sources, as well as a seismic report if the project encompasses a seismically active area.

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (k) A description of any current water treatment processes being used and any proposed treatment process being considered, with the differences in construction and OM&R costs listed for each alternative.
 - (l) Identification of the total power required for all project features and description of how the power will be delivered, including identification of the potential power providers and features to be constructed to supply the power, as well as a description of the extent to which the project will use renewable energy sources.
 - (m) Description of opportunities for water conservation in the study area to reduce water use and water system costs, including demonstration technologies; and
 - (n) Identification of aspects of the alternative that apply a regional or watershed approach to promoting benefits, implementing integrated resource management, and enhancing water management flexibility.
- (3) **Nonviable Alternatives.** Each of the alternatives that were considered and determined to be nonviable will be described, and the reasons that each was not considered further will be stated.
- (4) **Recommended Plan.** The basis and rationale for selection of the preferred NEPA alternative, the National Economic Development (NED) Plan, and the recommended plan will be described. The NED Plan will be chosen as the recommended plan. Recommending a plan other than the NED will require a Secretarial exception as mandated in the Principles and Guidelines. A discussion and evaluation of areas of risk and uncertainty associated with the preferred alternative will also be provided.
- (5) **Environmental Compliance.** NEPA compliance and compliance with other applicable requirements, including the Fish and Wildlife Coordination Act, Endangered Species Act (ESA), National Historic Preservation Act (NHPA), and other related environmental and cultural resource laws, will be completed concurrently with the feasibility study. These requirements will be completed in accordance with applicable NEPA rules and regulations and RM D&S, *Cultural Resources Management*, LND 02-01, and will be integrated into the feasibility study.
- (6) **Legal and Institutional Requirements.** For each viable alternative, including the preferred alternative, the feasibility study must include:

Reclamation Manual

Directives and Standards

TEMPORARY RELEASE

(Expires 07/11/2011)

- (a) an analysis of any water rights or source water protection issues resulting from implementation of the proposed project;
 - (b) a discussion of legal and institutional requirements (e.g., contractual water supply obligations, Indian trust responsibilities, water rights settlements, regional water quality control board requirements) with the potential to affect implementation of the project;
 - (c) identification of permitting or regulatory compliance that may be needed, including ESA and Clean Water Act permits (401, 402, 404 permits), archaeological surveys, and any other local, state, Federal or tribal permits required;
 - (d) the availability of rights-of-way and land needed for any project facilities; and
 - (e) in the case of a project intended for Indian tribes and tribal organizations, an assessment of the extent to which the project addresses the goal of economic self-sufficiency.
- (7) **Capability to Pay.** In accordance with § 404.49 (d)(10) of the Rule, the Project Sponsor(s) must demonstrate in the feasibility study that they are capable of paying at least 25 percent of the design and construction costs—or an amount exceeding 25 percent of the design and construction costs—and 100 percent of the OM&R costs. The factors required to evaluate whether the Project Sponsor(s) have met this burden are described in § 404.39 of the Rule. Technical guidance that may be used for assistance in determining an entity's financial capability is provided in Reclamation Technical Memorandum EC-2009-02, *Evaluating Economic and Financial Feasibility of Municipal and Industrial Water Projects*.
13. **Feasibility Report.** As provided in § 404.50 of the Rule, the feasibility report will include Reclamation's finding as to whether the proposed project is feasible, whether it should be authorized for construction, and the appropriate Federal and non-Federal share of construction costs including the appropriate mix of grants and loan guarantees to cover the Federal share of the costs. If Reclamation finds that the project is feasible and should be recommended for construction, the report will include an analysis of the Project Sponsor(s)' capability to pay 100 percent of OM&R and at least 25 percent of construction costs, as well as any additional construction costs beyond 25 percent, as appropriate. Reclamation will make this determination using the criteria in § 404.39 of the Rule. For projects including Indian tribes, Reclamation will rely on the criteria in § 404.38 of the Rule to determine the appropriate non-Federal share of construction costs.